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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/656,630

09/05/2003

David J. Parins

1001.1674101

8129

28075 7590 12/20/2006  
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EXAMINER

HOEKSTRA, JEFFREY GERBEN

ART UNIT

PAPER NUMBER

3736

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

12/20/2006

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/656,630	Applicant(s) PARINS, DAVID J.	
	Examiner Jeffrey G. Hoekstra	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 34-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Notice of Amendment*

1. In response to the amendment filed on 07/21/2006, amended claims 1, 9, 17, and 25 are acknowledged. The current rejections of the claims 1-33 are *withdrawn*.

The following new and reiterated grounds of rejection are set forth:

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson et al (US 2001/0009980) in view of Kaldany (US 5,222,949).

4. For claims 1, 9, 17, and 25, Richardson et al discloses the claimed invention, including: an intracorporal medical device (10), comprising: an elongate shaft (18), a flexible helically wound coil (22) having a plurality of windings disposed about said shaft, a thermoplastic polymer sleeve (28) disposed about said coil via localized heating (paragraph 26), and a continuous affixation area disposed about the length of said coil wherein said continuous affixation area affixes the sleeve to two or more coil windings as best seen in Figure 11 (paragraph 28 lines 12-15) facilitating control over mechanical properties of the medical device. Richardson et al discloses the claimed invention as broadly as structurally claimed except for a plurality of discrete affixation points wherein

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each discrete affixation point is separated from other discrete affixation points by areas where the polymer sleeve is not affixed to the coil. Kaldany teaches an intracorporal device (30) comprising: the application of radiation (Abstract) for affixation to a plurality of discrete affixation points (20) along said device, as best seen in Figures 1a and 1b, wherein each discrete affixation point is separated from other discrete affixation point by areas where the polymer sleeve is untreated (10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the intracorporal medical device as taught by Richardson et al, with the affixation as taught by Kaldany for the purpose of configuring the variable mechanical properties of an intracorporal medical device.

5. For claims 2, 10, 18, and 26, Richardson et al discloses the claimed invention except for the plurality of discrete affixation points including 10 discrete affixation points disposed along the device length. Kaldany teaches and shows a plurality of discrete affixation points including 10 discrete affixation points disposed along the device length as best seen in Figures 1a and 1b (column1 line 34 – column 2 line 26). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the intracorporal medical device as taught by Richardson et al, with the localized heating of polymers taught by Kaldany for the purpose of configuring the variable mechanical properties of an intracorporal medical device.

6. For claims 3, 11, 19, and 27, Richardson et al discloses the claimed invention except for the plurality of discrete affixation points forming a non-uniform pattern along the device length. Kaldany teaches configuring the plurality of discrete affixation points

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forming a non-uniform pattern along the device length (column 7 lines 42-54). . It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the intracorporal medical device as taught by Richardson et al, with the affixation as taught by Kaldany for the purpose of configuring the variable mechanical properties of an intracorporal medical device.

7. For claims 4-5, 12-13, 20-21, and 28-29, Richardson et al discloses the claimed invention except for (a) the plurality of discrete affixation points having a density of discrete affixation points per unit length of device that decreases along the device length or (b) the plurality of discrete affixation points form a uniform pattern along the coil length. Kaldany teaches configuring the plurality of discrete affixation points having a density of discrete affixation points per unit length of device that decreases along the device length (column 3 line 45 – column 4 line 5) and (b) the plurality of discrete affixation points form a uniform pattern along the coil length (column 3 line 45 – column 4 line 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the intracorporal medical device as taught by Richardson et al, with the affixation as taught by Kaldany for the purpose of configuring the variable mechanical properties of an intracorporal medical device.

8. For claims 6-8, 14-16, 22-24, and 30-33, Richardson et al discloses the claimed invention, including affixing the polymer sleeve to multiple coil windings (paragraph 21-23) said affixing may be in an orthogonal relationship to configure the device with mechanical properties suitable to traverse tortuous internal vasculature , except for (a) each discrete affixation point affixing 3 to 10 or 3 to 20 coil windings to the thermoplastic

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sleeve, (b) each discrete affixation point is a element having a width of 0.1 to 0.5 mm and a length of 0.1 to 0.3 mm, or (b) the density of discrete affixation points per unit length decreases from the proximal end to the distal end. Kaldany teaches configuring (a) each discrete affixation point to be sized according to the desired mechanical properties required for the device (column 3 line 45 – column 4 line 5), (b) each discrete affixation point is a element having a width of 0.1 to 0.5 mm and a length of 0.1 to 0.3 mm (column 3 line 45 – column 4 line 5), and (c) the density of discrete affixation points per unit length decreases from the proximal end to the distal end (column 3 line 45 – column 4 line 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the intracorporal medical device as taught by Richardson et al, with affixation as taught by Kaldany for the purpose of configuring the variable mechanical properties of an intracorporal medical device.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1-33 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey G. Hoekstra whose telephone number is (571)272-7232. The examiner can normally be reached on Monday through Friday, 8:00 a.m. to 5:00 p.m. EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max F. Hindenburg can be reached on (571)272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JH

JH

*Max F. Hindenburg*  
Max F. Hindenburg  
Supervisor  
Art Unit 3736  
Date: 08/08/2008